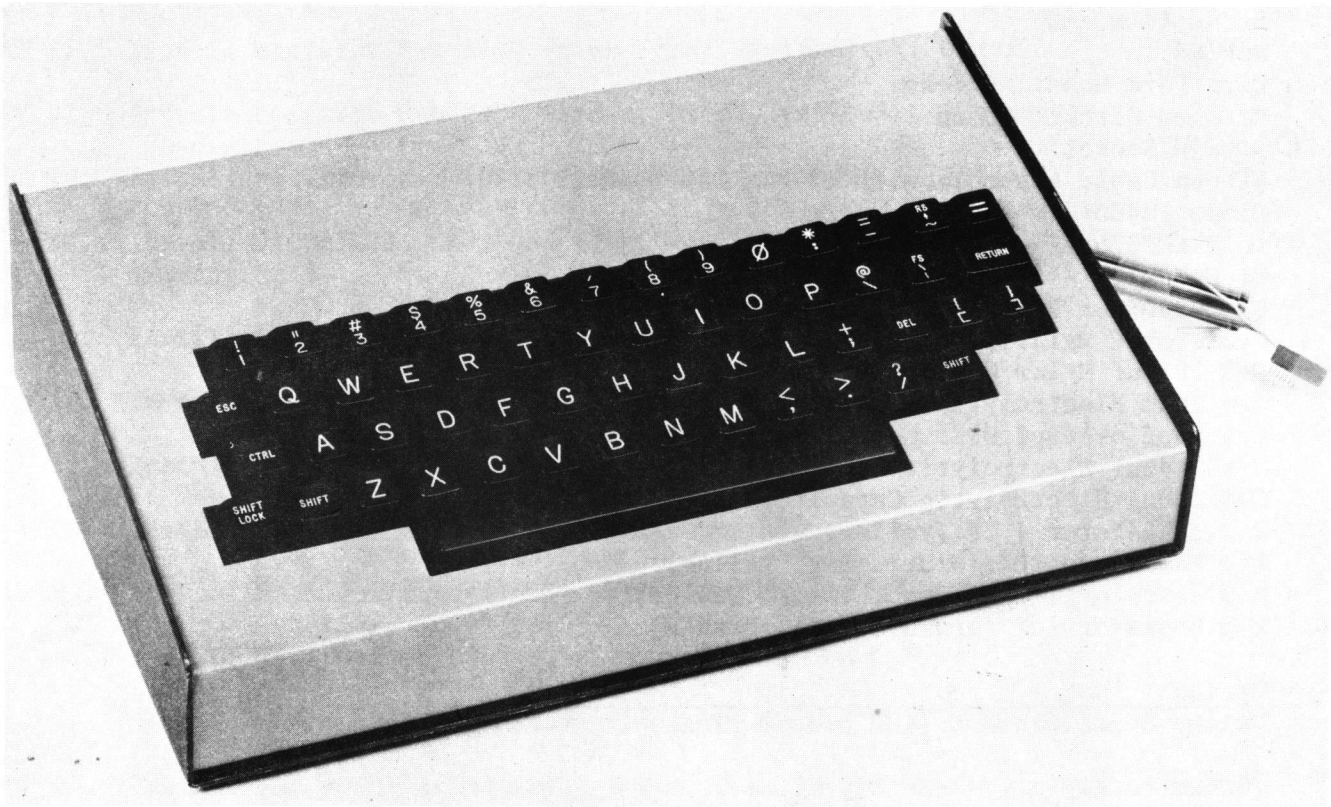
FOR USE WITH NETRONICS VID VIDEO BOARD

ASC II -A

ASSEMBLY INSTRUCTIONS



SPECIFICATIONS

Power Requirements: 6.3 -8V AC or +5, -12V DC
Full 128 character ASCII set
2 key rollover
Upper and lower case
Selectable parity
Positive or negative logic output
Shift lock key
G-10 glass expoxy printed circuit board
Connects to any 8-bit parallel I/O port
Alpha lock jumper (permits upper case only operation)
Drive capability (one TTL load)

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ASCII KEYBOARD
ASSEMBLY INSTRUCTIONS

Check all parts in your kit against the following list.

Description	Quantity
Momentary Switches	55
Latching Switch	1
Switch Caps as per parts layout	56 + space bar
Space Bar Wire Form	1
Space Bar Wire Form Holder	2
Screw #4 x 3/8"	2
Nut #4	2
Wire Form Mounting Yoke	1
Printed Circuit Board	1
40 Pin Socket	1
Ribbon Cable Assembly with 14 Pin Dip Headers (6")	1
Diode IN4001	3
IC-1 KR2376-012	1
Q1 UA79M12 (-12V Regulator)	1
Q2 LM340T or 7805 (+5V Regulator)	1
C-2 .001uf Mylar Capacitor — Disc	1
C-3 .047uf Mylar Capacitor	1
C-4 10uf Electrolytic Capacitor	1
C-5 56pf or 68pf Disc Capacitor — 56pf	1
C-6,7 47uf Electrolytic Capacitor	2
C-8 100uf Electrolytic Capacitor	1
R-2,3 Resistor 4.7K (yellow, violet, red)	2
R-4 Resistor 680K (blue, gray, yellow)	1
R-5 Resistor 100K (brown, black, yellow)	1
R-6 Resistor 10K (brown, black, orange)	1

Optional	Price
Deluxe Steel Cabinet (IBM blue & black)	$19.95 + $2.50 P&H

(Refer to Keyboard Assembly Figure)
DO NOT INSTALL IC's UNTIL POWER CHECK HAS BEEN MADE

(✓) 1. Mount wire form mounting yoke on top side of P.C. board. Use 2 #4 screws and nuts.

(✓) 2. Install 40 pin IC socket at location IC-1. (Solder)

(✓) 3. Install key switches. Note: Solder one lug only. The second lug will be soldered after the key caps have been installed and straightened. There are three possible sets of holes for the RETURN key switch. Use the center set of holes. The shift lock key is the latching type switch and should be installed first.

(✓) 4. Install key caps (do not install space bar yet).

(✓) 5. Check alignment of keys and straighten keys by heating solder connection and repositioning switch.

( ) 6. Solder remaining unsoldered switch lugs.

( ) 7. Install the two space bar wire form holders into the end slots on the bottom of the space bar. The holes must face the middle of the space bar.

( ) 8. Install the wire form into the mounting yoke on the P.C. board, as shown.

( ) 9. Install the space bar on the key switch. Then insert the wire form into the wire form holder on the space bar.

( ) 10. Install resistor R-2,3, 4.7K (yellow, violet, red). (Solder)

( ) 11. Install resistor R-4 680K (blue, gray, yellow). (Solder)

( ) 12. Install resistor R-5 100K (brown, black, yellow). (Solder)

( ) 13. Install resistor R-6 10K (brown, black, orange). (Solder)

( ) 14. Install diode CR1, CR2, CR3 (IN4001). NOTE: Band must face as per assembly drawing.

( ) 15. Install Q1 (UA79M12), as shown. (Solder)

( ) 16. Install Q2 (LM340T or 7805), as shown. (Solder)

( ) 17. Install C-2 .001 Mylar capacitor. (Solder)

( ) 18. Install C-3 .047 Mylar capacitor. (Solder)

( ) 19. Install C-4 10uf capacitor. Note polarity. (Solder)

( ) 20. Install C-5 56pf or 68pf disc capacitor. (Solder)

( ) 21. Install C-6,7 47uf capacitor. Note polarity. (Solder)

( ) 22. Install C-8 100uf capacitor. Note polarity. (Solder)

JUMPER SELECTION

If you are using the ASCII keyboard with your ELF II or Explorer 85, connect jumpers as follows. If you are using a different computor, check the jumper table and connect as per your requirements.

( ) 23. Connect J2, J4. (Solder) Note no parity signals are used on ELF II.

JUMPER TABLE

J1 - LOGIC, J3 UPPER & LOWER CASE, J5 ODD PARITY
J2 + LOGIC, J4 UPPER CASE ONLY, J6 EVEN PARITY

( ) 24. Solder ribbon cable assembly as per assembly drawing. Note pin #1 must be positioned as shown. (A socket could be used but will not be as reliable).

POWER SUPPLY TEST

Check all soldering and components for proper value. There are three alternative methods to power your ASCII keyboard: (1) use 6.3 -8V AC transformer, (2) use your Netronics expansion power supply kit, (3) use a separate +5V and -12V (regulated) supply.

If you are using an AC supply (1 or 2 above):

(✓) 1. Connect the 6.3 -8V AC to the P.C. board. If you are using a separate AC transformer be sure to connect the ground terminal on your keyboard to the ground on your computor or video display board.

(✓) 2. Measure the DC voltage at the +5V and -12V pads on the P.C. board. They should read within 5% of the specified values. Do not proceed to install the IC if the voltage is improper. If you are using a separate +5V and -12V supply measure the voltage before inserting the IC.

(✓) 3. Disconnect the power supply.

(✓) 4. Install IC-1. Note location of pin #1.

( ) 5. Plug the 14 pin ribbon cable into the video display board. Note the position of pin #1.

WARRANTY

All of the components supplied in this kit are under warranty for six months from the date of purchase. Any parts suspected to be defective should be returned to Netronics with $1.00 for postage and handling. They will be tested and returned postpaid.

IN CASE OF DIFFICULTY

In the event of difficulty, check all wiring against the instructions. Check for solder bridges and all component values. If you still cannot determine the problem, return the defective printed circuit board ONLY. Please enclose a check or money order for $7.00 and pack the board securely, and insure the parcel. Your unit will be tested and returned insured and postpaid.

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